LISTING OF THE CLAIMS:

1. (Currently Amended) A microwave generator (11) with a radiation antenna (26) which is connected to capacitors (13) which are to be recharged, and a high-voltage generator (35) comprising an energy supplier for charging up the capacitors (13), wherein

the high-voltage generator (35) is connected through the radiation antenna (26) to a coaxial succession of annular capacitors (13) which are sequentially connectable in parallel with each other[.], said capacitors (13) possessing first and second electrodes (15, 16), each capacitor having a respective tubular said second counterpart electrode (16) connected together with the other electrode (16) while the first electrode (15) is connectable by a switch (39) to the most closely adjacent further electrodes (15), and wherein disposed in the interior of a respective tubular said second electrode (16) are a number of axially mutually spaced annular said first electrodes (15).

Claims 2 and 3 (Cancelled).

- 4. (Currently Amended) A microwave generator according to claim [3] 1 wherein the annular first electrodes (15) are of a cup-shaped configuration with a centrally apertured bottom (19) through which said electrodes are arranged in a row on a carrier (20).
- 5. (Previously Presented) A microwave generator according to claim 4, wherein spacer elements (21) are arranged on the carrier (20) between the cup bottoms (19).

- 6. (Currently Amended) A microwave generator according to claim 5, wherein the cupshaped electrodes (15) are braced axially on the carrier (20) by the provision of an end cap (22) and the spacer elements (21) between said cup bottoms (19).
- 7. (Currently Amended) A microwave generator according to claim [3] 1, wherein the spacings (17) between the annular electrodes (15) and the end profiles thereof are in the form of arc switches (39).
- 8. (Previously Presented) A microwave generator according to claim 4, wherein a frustoconical radiation antenna (26) is centered by the carrier (20) and is electrically connected with the smaller base (27) thereof to the first capacitor (13) located adjacent thereto on the carrier (20).
- 9. (Currently Amended) A microwave generator according to claim [2] 1, wherein the capacitor (13) which is located remotest from the energy infeed has an arc switch (39) in relation to a terminating electrode (33) which is at the potential of the respective counterpart electrode (16).

Claims 10 and 11 (Cancelled).